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# DECISION of 10 November 2000

Case Number: T 0945/98 - 3.3.5

Application Number: 91904360.4

Publication Number: 0471049

C01B 33/32 IPC:

Language of the proceedings: EN

# Title of invention: Silicate products

## Patentee:

CROSFIELD LIMITED

#### Opponent:

Henkel Kommanditgesellschaft auf Aktien

#### Headword:

Silicate products/CROSFIELD

## Relevant legal provisions:

EPC Art. 84, 123(2), 56

## Keyword:

"Amendments not clear/not based on original disclosure - no incorporation by reference (main request and auxiliary requests 1 to 7)"

"Inventive step - yes (auxiliary request 8)"

## Decisions cited:

T 0006/84, T 0689/90

#### Catchword:



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Boards of Appeal

Chambres de recours

Case Number: T 0945/98 - 3.3.5

DECISION
of the Technical Board of Appeal 3.3.5
of 10 November 2000

Appellant: Henkel

(Opponent) Kommanditgesellschaft auf Aktien

TFP/Patentabteilung 40191 Düsseldorf (DE)

Representative: -

Respondent: CROSFIELD LIMITED

(Proprietor of the patent) Bank Quay

Warrington

Cheshire WA5 1AB (GB)

Representative: Barendregt, Frank, Drs.

van Exter Polak & Charlouis B.V.

PO Box 3241

2280 GE Rijswijk (NL)

Decision under appeal: Interlocutory decision of the Opposition Division

of the European Patent Office posted 24 July 1998

concerning maintenance of European patent

No. 0 471 049 in amended form.

Composition of the Board:

Chairman: R. K. Spangenberg

Members: B. P. Czech

M. B. Günzel

- 1 - T 0945/98

# Summary of Facts and Submissions

- I. The appellant (opponent) lodged an appeal against the interlocutory decision of the opposition division to maintain the patent No. 0 471 049 in amended form.
- II. The opposition was filed against the patent as a whole and based on Article 100(a) EPC. Lack of novelty and inventive step was alleged based on documents
  D1: US-A-3 687 640 and D2: US-A-3 971 631.
- III. In the contested decision, the opposition division held that D2 was novelty-destroying for the method of claim 1 as granted, but that the subject-matter of claims 1 to 6 according to auxiliary request 3 filed during the oral proceedings before the opposition division met the requirements of the Convention.
- IV. In a communication sent in preparation for the oral proceedings requested by both parties, the board drew the parties' attention to documents D3: US-A-3 875 282 and D4: US-A-3 931 036 (both cited in the patent in suit). The board also made some observations concerning the meaning of and the basis, in the application as originally filed, for certain amendments of claim 1 as granted.
- V. With a letter dated 10 October 2000, the respondent submitted a set of photographs to show differences between the particles referred to in the patent in suit and in the prior art.
- VI. During the oral proceedings before the board, the respondent filed further sets of amended claims as auxiliary requests.

- 2 - T 0945/98

- VII. The appellant requested that the decision under appeal be set aside and the patent be revoked.
- VIII. As main request, the respondent requested that the appeal be dismissed.

As auxiliary requests 1 to 9 the respondent requested that the decision under appeal be set aside and the patent be maintained with a claim 1 of any of auxiliary requests 1 to 9 as filed during the oral proceedings, taken in their consecutive order, claims 2 to 6 as granted and a description to be adapted.

IX. The wording of independent claim 1 of the patent as maintained by the opposition division (submitted on 8 May 1998) reads as follows, with features added to claim 1 as granted during the opposition procedure being highlighted in **bold**:

A method of treating compacted sodium silicate granules obtained by compacting dried material between rollers to provide a compacted sheet-like product which is subsequently broken up and sieved to provide an average particle size in the range from about 0.3 mm to about 2 mm, having a mole ratio  $SiO_2/Na_2O$  of from about 1.5 to about 3.3:1, wherein the granules are contacted with moisture in an agitated bed, ensuring that the moisture content of the silicate is not increased by more than 2.0% by weight.

Claim 1 according to auxiliary request 1 reads as follows, with those passages which differ from the wording of claim 1 according to the main request being highlighted in **bold**:

- 3 - T 0945/98

"A method of treating compacted sodium silicate granules obtained by compacting the appropriate feedstock between rollers to provide a compacted sheet-like product which is subsequently broken up and sieved to provide compacted silicate granules with an average particle size in the range from about 0.3 mm to about 2 mm, having a mole ratio  $SiO_2/Na_2O$  of from about 1.5 to about 3.3:1, wherein the compacted silicate granules are contacted with moisture in an agitated bed, ensuring that the moisture content of the compacted silicate granules thus treated is not more than 2.0% by weight above the moisture content of the compacted silicate granules before treatment."

In the respective claims 1 of the auxiliary requests 2 to 9 the wording of claim 1 according to the auxiliary request 1 was amended as follows:

Auxiliary request 2:

Replacement of "2%" by "1.6%".

Auxiliary request 3:

Replacement of "2%" by "about 1%".

Auxiliary request 4:

Replacement of "the appropriate feedstock" by "dried hydrous material".

Auxiliary request 5:

Replacement of "the appropriate feedstock" by "dried

- 4 - T 0945/98

hydrous material", and replacement of "2%" by "1.6%".

Auxiliary request 6:

Replacement of "the appropriate feedstock" by "dried hydrous material", and replacement of "2%" by "about 1%".

Auxiliary request 7:

Replacement of "the appropriate feedstock" by "spray-dried sodium silicate".

Auxiliary request 8:

Replacement of "the appropriate feedstock" by "spray-dried sodium silicate", and replacement of "2%" by "1.6%".

Auxiliary request 9:

Replacement of "dried material" by "spray dried sodium silicate", and replacement of "2%" by "about 1%".

X. Concerning the amendments carried out in the respective claims 1 of all requests, the appellant raised objections under Articles 84 (clarity) and/or under Article 123(2) EPC against the features "dried material", "appropriate feedstock", "dried hydrous material", "1.6%" and "about 1%".

The appellant further argued that the skilled person

would know that rounded particles are less prone to attrition. Starting from particles as disclosed in D3 and D4, the process according to the independent claims of any of the above requests would thus lack the required inventive step in view of D1 and D2, where such a rounding of silicate granules was obtained by means of added moisture. Applying the teaching of D1 or D2, where the same end-products were to be obtained, to the granules of D3 or D4 would have been an obvious measure.

## XI. The respondent argued as follows:

The amendments carried out in the respective claims 1 of all requests were clear and based on the description of the application as filed, in particular when taking into consideration the general knowledge of the skilled person and/or the contents of D3 and D4. He cited decision T 6/84 to support his view.

Concerning inventive step, he essentially argued that - in contrast to the methods disclosed in D1 and D2 - an agglomeration was not intended according to the process of the invention. The main object of the claimed method was to improve the attrition resistance of the compacted granules, which object was not addressed in any of the cited documents. He also submitted a physical explanation for the improvement in attrition resistance.

## Reasons for the Decision

1. Main request - Amendments

- 1.1 Amendment concerning the definition of the starting material of the claimed process
- 1.1.1 As pointed out by the respondent, the passage on page 2, lines 7 to 12 of the application as filed and published as WO-A-91/13206 provides a certain basis for this amendment. The passage reads: "Disilicates and other silicates can be formed into a product of the desired bulk density by compacting the appropriate feedstock, which may be spray-dried material, between rollers to provide a compacted sheet-like product which is subsequently broken up and sieved to provide the desired particle size range". It can be considered to provide a narrower, "product-by-process"-type definition of the term "compacted sodium silicate granules" as used in claim 1 as originally filed and granted.
- 1.1.2 As acknowledged by the respondent during the oral proceedings, the contested patent contains no literal basis for the expression "dried material" in general, only "spray-dried material" being explicitly mentioned in the passage quoted and also in Example I.
- 1.1.3 There is no evidence that the type of the starting material to be compacted between the rollers, i.e. its method of preparation, particle morphology and properties such as dryness, has no impact on the morphology and properties of the compacted granular material to be used as starting material in the claimed process. Accordingly, the cited passage of the description cannot provide a basis for the more general feature "dried material".
- 1.1.4 During the oral proceedings, the respondent argued that

- 7 - T 0945/98

the feature "dried material" was disclosed in the application as originally filed by reference to documents D3 and D4. He cited decision T 6/84 (OJ EPO 1985, 238) to support his view.

Under the heading "Background of the invention", the description of the application as filed generally mentions that (di)silicates "can be formed into a product of the desired bulk density by compacting .... between rollers to provide a compacted sheet-like product". Example I of the patent also refers to sodium disilicate "compacted between rollers". Under the same heading, the description goes on to say that "Examples of procedures which provide these compacted materials will be found in D3 and D4.

1.1.5 The nature of the compaction method used in the preparation of the starting material was not presented as critical in the application documents as filed. As pointed out by the appellant, the application as originally filed (see claim 1 thereof and the expression "can be formed...") did neither exclude known silicate starting materials obtained without a drying step (see e.g. the particles referred to in D3, column 1, lines 37 to 45) nor compaction methods not making use of rollers (see e.g. the methods of D1 and D2).

The originally filed application did thus not direct the skilled person's attention to D3 and D4 in a manner implying that some of the features disclosed in these documents would have to be considered as part of the original disclosure of the present invention. On the contrary, according to the description, the reference

to D3 and D4 was only made to provide "examples of procedures which provide these compacted materials".

Since the description merely refers to D3 and D4 in general terms, for illustrating possible ways of compaction of possible starting materials, the reference to D3 and D4 cannot be considered as an "incorporation by reference" of any particular feature of any compaction method disclosed only in these documents. Thus, the board takes the view that in the present case, in view of the wording of the quoted passage, it is far from being unambiguously clear that any feature of the methods for obtaining the compacted sodium silicate granules disclosed in D3 or D4 was ever intended to supplement the disclosure of the application as originally filed.

- 1.1.6 The facts of the present case are therefore different from the ones of the case underlying decision T 6/84, where the description referred to the more specific information comprised in a further document but concerning a defined material which unequivocally formed part of the invention for which protection was sought.
- 1.1.7 The amendment consisting in the incorporation of features neither implicitly nor explicitly disclosed in the application as filed, but allegedly disclosed in D3 and D4 only, can thus be considered not to meet the requirement of Article 123(2) EPC. This view is in agreement with decision T 689/90 (OJ EPO 1993, 616), reasons 1.4 and 2.2, where decison T 6/84 was also considered.
- 1.2 Amendment concerning the moisture content increase

- 9 - T 0945/98

- 1.2.1 The passage on page 3, lines 14 to 19 of the application as filed, relating to this feature, states that "The moisture as liquid water or water vapour, e.g. steam, will be applied at a rate and for a time to ensure the moisture content of the disilicate is not increased by more than about 1% by weight."
- 1.2.2 The sole reference in the application as filed and in the patent in suit to the discrete value of "2.0% by weight" is to be found in Example IV. However, Example IV is silent about any specific moisture increase of the particles. All it says is that "2% wt water" are "added over the period of stirring" during the treatment of sample D. The passage does thus not clearly specify that the moisture of the particles is increased by 2.0%.
- 1.2.3 Moreover, Example IV does not clearly specify whether the compaction step is carried out using rollers, as required by present claim 1. Considering the more general meaning of "compacted" in the application as originally filed (see eg original claim 1), it cannot simply be assumed as suggested by the respondent that this would necessarily be the case, nothing else ever having been intended.
- 1.3 Therefore, since claim 1 as amended does not fulfill the requirement of Article 123(2) EPC, the main request must fail.
- 2. Auxiliary requests 2 to 7

In the respective claims 1 according to these auxiliary requests, the respondent has made various attempts to replace the term "dried material" by other definitions

- 10 - T 0945/98

of the material to be compacted and/or to amend the value of the upper limit of the particle moisture increase, together with a modification of the wording used to express the moisture increase quantitatively.

- 2.1 The expression "the appropriate feedstock" as used in auxiliary requests 1 to 3 to replace "dried material" of claim 1 according to the main request finds a literal basis in the passage of the patent quoted under 1.1.1.
- 2.1.1 According to the respondent, the skilled person would understand that only such materials are to be considered which are suitable for being roller compacted, these "appropriate materials" being known from the technical literature, eg from D3 and D4. As conceded by the respondent during the oral proceedings, "appropriate" is a relative term. The board takes the view that the patent does not say that the relative term "appropriate" necessarily relates to the suitability of the feedstock for roller compaction, rather than to some other desirable property of the starting material. All the amended claim says is that some kind of sodium silicate starting material is compacted between rollers, compacting implicitly meaning increasing the bulk density. In the board's view no clear further limitation is implied by the relative term "appropriate" (Article 84 EPC).
- 2.1.2 Auxiliary requests 1 to 3 all containing the unclear relative feature "appropriate feedstock" must thus fail since they do not meet the requirement of Article 84 EPC.
- 2.2 The general expression "dried hydrous material" as used

- 11 - T 0945/98

in the respective claims 1 of auxiliary requests 4 to 6 has no explicit or implicit basis in the patent. This is not in dispute.

- 2.2.1 For the reasons set out in items 1.1.5 to 1.1.7, the reference to documents D3 and D4 is not suitable for "completing" the disclosure of the application as filed with information concerning the moisture of the material to be compacted.
- 2.2.2 Since the amended claims 1 comprising the feature "dried hydrous material" do not, therefore, fulfill the requirement of Article 123(2) EPC, auxiliary requests 4 to 6 must also fail.
- 2.3 In claim 1 according to auxiliary request 7, the indication concerning the upper limit of the moisture content of the treated material has been amended to read "..not more than 2.0% by weight above the moisture content of the compacted granules before treatment".
- 2.3.1 The board is satisfied that this revised wording clearly expresses that the increase of particle moisture in % by weight corresponds to the difference between the respective moisture contents of the starting material and the treated material (absolute increase). The appellant did not object to this wording as far as it defines the numerical value of the increase in particle moisture.
- 2.3.2 However, irrespective of the wording chosen to express the increase in particle moisture, and by analogy with what has been indicated under items 1.2.2 and 1.2.3 above, the patent does not provide a valid support for this amendment as far as relating to the specific value

- 12 - T 0945/98

- of "2% by weight", let alone in combination with roller compaction.
- 2.3.3 Therefore, amended claim 1 according to auxiliary request 7 does not fulfill the requirement of Article 123(2) EPC, so that this request must also fail.
- 3. Auxiliary request 8
- 3.1 Amendments
- 3.1.1 The feature "compacting spray dried sodium silicate between rollers" finds a literal basis in the passage quoted under 1.1.1. and in claim 1 (sodium silicates) as originally filed and granted. This expression is also narrower in scope than "compacted sodium silicate granules" as used in claim 1 as granted. This was also acknowledged by the appellant, who did not object to this amendment. Hence, this amendment meets the requirements of Article 123(2) and (3) EPC.
- 3.1.2 A basis for the feature "... ensuring that the moisture content of the compacted granules thus treated is not more than 1,6% by weight above the moisture content of the compacted silicate granules before treatment" can be found in Example I, Table I of the application as filed and the patent as granted.
- 3.1.3 Example I is concerned with the treatment of spray-dried sodium silicate, which has been compacted between rollers. Since the particles size range given in claim 1 has already been presented as essential upon filing (see original claim 1), it can be assumed that the material has indeed been broken up and sieved to

- 13 - T 0945/98

provide this desired particle size. More particularly, Table I discloses a moisture content of 18.6% for the starting material and a maximum moisture content of 20.2% for a material treated with steam for 3 minutes. Hence, the resulting difference in moisture is 20.2 - 18.6 = 1.6%. The passage on page 4, lines 25 to 26, relating to the "added moisture" of the "4 minute product" supports this way of establishing the moisture increase in question. The material obtained is considered as essentially non-caking (rating of 1 on a 0 (good) to 5 (poor) scale).

Roller-compacted spray-dried sodium silicate granules treated with more steam (see last row of Table I, and having a higher final moisture content (21,8%, corresponding to a difference in moisture of 21.8 -18.6 = 3.2%) were found to be caking (rating of 4 on the same scale). The value of 1.6% can thus be considered to be the preferred upper limit for the moisture increase range, corresponding to a threshold above which these specific products will be prone to caking and hence unsuitable for certain uses. This interpretation of Example 1 is in conformity with the general disclosure in the description referred to in item 1.2.1 above, where in the same context a moisture content of "about 1% by weight" is disclosed. In these circumstances, the board holds that the extraction of this feature from the specific Example I and its incorporation into the more generic context of claim 1 meets the requirement of Article 123(2) EPC.

3.1.4 According to page 3, line 50, the moisture content is defined as the "loss in weight on 1 hour drying at 900°C". It follows from this indication that the weight % moisture correspond to the relative amount of

water comprised in the particles based on the weight of the moist particles. The board is satisfied that the wording adopted in present claim 1 to specify the moisture increase during the process, i.e. "... the moisture content of ... granules thus treated is not more than 1.6% by weight above the moisture content of ... granules before treatment", makes it clear that the value for the moisture (water content) of the treated material expressed in % by weight (based on the weight of the moist particle) may at most be 1.6 units higher than the one for the starting material. The appellant did not raise any further objection in this respect.

- 3.1.5 For these reasons, the board holds that claim 1 as amended also meets the requirements of Article 84 EPC.
- 3.2 Novelty Articles 52(1) and 54(1)(2) EPC

The Board is satisfied that the method according to claim 1 is novel with regard to the documents cited. Since novelty was no longer challenged during the appeal procedure, there is no need to give detailed reasons for that finding.

- 3.3 Inventive step Articles 52(1) and 56 EPC
- 3.3.1 According to the patent in suit, sodium silicate particles obtained by compaction and intended for use in detergent compositions for mechanical dishwashing demonstrate a high loss of material during handling by virtue of attrition (see page 2, lines 13 to 22 and lines 32 to 36).
- 3.3.2 Documents D3 and D4 both disclose silicate granules obtained by compaction of spray-dried sodium silicates

of the specified SiO<sub>2</sub>/Na<sub>2</sub>O ratio between rollers, breaking up the sheet-like material obtained and sieving the granules obtained to size ranges falling within or overlapping with the range specified in claim 1. The silicate granules obtained are suitable for the envisaged purpose (see patent in suit, page 2, lines 22 to 24). These documents, therefore, represent the state of the art that the patent in suit sets out to improve on, and the technical problem to be solved consists in reducing the loss of material as fines due to attrition during handling of such sodium silicate materials, in particular during pneumatic handling.

3.3.3 As a solution to this problem, the patent proposes treating the sodium silicates with moisture under the conditions specified in claim 1.

The appellant argued that the claimed method was not limited to processes which indeed led to an improved attrition resistance of the treated particles. However, although the burden to prove this allegation was on him, he did not provide any convincing line of argument, let alone comparative evidence showing that when treating the specified starting materials under the specified conditions of claim 1 the effect in question would not always be obtained.

The experimental results reproduced in Table I of Example I (see values in column "Fines") demonstrate that the technical problem is solved with respect to the specific roller-compacted spray-dried sodium silicates referred to in claim 1. The board therefore accepts that the claimed method is effective for reducing the attrition of the specified starting materials during pneumatic transport.

- 3.3.4 Spray-dried sodium silicates usually have a residual moisture content of around 20% and may be compacted by rollers, as evidenced by D3 and D4. The board accepts the respondent's submission that granules obtained by roller compaction of such spray-dried materials have a specific structure with high density but residual porosity (see e.g. photographs I-1 to I-4 submitted by the respondent), which allows added moisture to penetrate the granule and thereby strengthen the granules internally. No arguments refuting this explanation have been put forward by the appellant.
- 3.3.5 Documents D3 and D4 are silent about any aftertreatment of the compacted granules. Since the
  attrition problem is not even mentioned in these
  documents, they cannot possibly suggest the solution
  thereof as claimed.
- 3.3.6 Documents D1 (example 11) and D2 (example 1) relate to the agglomeration or pelletisation of small spray dried sodium silicate particles into larger granules by means of heating and water addition in an agitated bed.

  Whereas D2 teaches a pelletisation by means of moisture addition and optional heating (column 5, lines 5 to 22), D1 discloses agglomeration by heating, by heating and moisture addition, or by moisture addition alone (see column 2, lines 68 to 70, column 3, lines 34 to 40 and column 4, lines 9 to 26).
- 3.3.7 Due to their specific method of preparation, the starting materials used according to the method of claim 1 are physically different from the ones subjected to moisture treatment according to D1 and D2. As indicated in the decision of the opposition division (see page 5, second paragraph) and as acknowledged by

- 17 - T 0945/98

the appellant (see submission dated 15 July 1999, page 1, last paragraph), roller compaction leads to differences that are visible, e.g. under a microscope. The photographs submitted by the respondent (compare photographs I-1 to I-4 with the ones of series III to VI) confirm the differences between spray-dried roller-compacted materials and the particles involved in the methods of D1 and D2.

- 3.3.8 An agglomeration of the compacted starting particles is not aimed at during the moisture addition according to the claimed process. It clearly emanates from the description that the granules to be treated do already have the size desirable for the intended end uses, whereas the processes of D1 and D2 lead to a certain final equilibrium size of the agglomerates, depending on the materials and process conditions used, as pointed out by the appellant during the oral proceedings. According to D1 and D2, the agglomerates finally obtained are not submitted to any further dedicated after-treatment with moisture.
- 3.3.9 D1 (column 3, line 9), D2 (column 4, lines 50 to 54 and lines 62 to 66, column 5, lines 3 to 11 and lines 16 to 27, column 8, lines 52 to 56) and the description of the present patent (see page 2, lines 45 to 46) all mention a certain "rounding" of the granules during the treatment with moisture, leading to even surfaces of the final products obtained. D2 mentions the even surfaces in connection with high bulk density and free flowability (column 5, lines 7 to 8). Example 11 of D1 emphasises the free-flowing and non-caking character of the agglomerates obtained.

Throughout the procedure, but without providing any

kind of supporting evidence, the appellant has alleged that the attrition of the compacted granules to be treated is caused by their sharp edges and irregular surface. On that basis he argued that it would be clear to the skilled person that a rounding of the particles is equivalent to a reduced attrition of the granules. However, D1, D2 and the description of the patent do not explicitly indicate the purpose or the effects of such a "rounding". As pointed out by the respondent, roller compacted silicates generally have a satisfactory ball mill friability without any aftertreatment, as it is shown by Example II of the patent in suit. This example further demonstrates that a material having a satisfactory ball mill friability does not necessarily need to be resistant to attrition during pneumatic transport (see Table II, first row of values), irrespective of the exact type of compacted silicate material actually referred to in this example. The results indicated in Table II have not been contested as such by the appellant. Therefore, the appellant's allegation cannot be accepted.

3.3.10 According to D1, granular silicates are generally required to be "free-flowing" and "sufficiently durable to minimize dusting during storage and handling" (column 1, lines 28 to 29). Strength, stability and flowability of the granules obtainable by the process of D1 involving moisture addition are also addressed in a general way (column 1, lines 45 to 56, column 3, lines 1 to 6, column 4 and lines 54 to 56). According to D1, the purpose of moisture addition may be to provide "less dense" granules (column 4, line 9 to 13). The addition of water or silicate solution may be used to agglomerate the small particles, and the conditions under which this agglomeration is carried out may

- 19 - T 0945/98

generally have an impact on the granule strength (column 4, lines 30 to 38). Attrition as such is, however, not mentioned in D1. D2 does not address attrition or dusting at all.

The quoted passages of D1 make it clear that an addition of moisture is not necessarily required for agglomeration, and may even lead to granules less dense than when heat alone is used. Although D1 generally refers to particle strength and to durability during handling, there is no indication that the granules obtained by adding moisture would be resistant to attrition under ball milling conditions, let alone under conditions of pneumatic handling.

3.3.11 The methods as disclosed in D1 and D2 are thus applied to different starting materials for a different purpose, i.e. agglomeration. Hence it is questionable whether the skilled person, trying to find a solution to the above-mentioned technical problem, would turn to these documents at all.

Assuming nevertheless in the appellant's favour that these documents would have received attention, the skilled person could derive from D1 and D2 no more than that the starting granules as defined in claim 1 could probably be rounded by applying water to them in an agitated bed. However, the skilled person would certainly have found no incentive to consider this measure as a solution of the present technical problem, since D1 and D2 do not clearly state the purpose for such a rounding of the granules and do not, without the

benefit of hindsight, relate the rounding of the granules with their attrition resistance, let alone their resistance to attrition due to pneumatic handling.

Since the application of the moisture treatment disclosed in D1 and D2 as an after-treatment for the particles of D3 and D4 would thus only have occurred to a the skilled person having knowledge of the present invention (ex post facto), the board cannot accept the appellant's allegation that the improved attrition resistance can be considered as a "bonus effect" of an otherwise obvious process.

- 3.3.12 For these reasons, the subject-matter of claim 1 according to auxiliary request 8 is considered to be based on an inventive step as required by Articles 52(1) and 56 EPC. Claims 2 to 6 depending on claim 1 cover more specific embodiments of the process according to claim 1 and concern, therefore, novel and inventive subject-matter as well.
- 4. After the necessary adaptation of the description, which according to the respondent's request is left to the opposition division, the patent can therefore be maintained with the above claims.

- 21 - T 0945/98

# Order

# For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the opposition division with the order to maintain the patent with claim 1 of auxiliary request 8, filed during the oral proceedings, claims 2 to 6 as granted and a description to be adapted.

The Registrar:

The Chairman:

S. Hue

R. Spangenberg